## PROCEEDINGS

OF THE

# BIOLOGICAL SOCIETY OF WASHINGTON

## TWO NEW MURINE RODENTS FROM EASTERN ASIA.

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Material in the United States National Museum collected in Manchuria and China by Mr. Arthur de C. Sowerby and Mr. W. W. Simpson includes two undescribed murine rodents.

#### Apodemus praetor sp. nov.

1862? [Mus sylvaticus] vrt. major Radde, Reisen im Suden von Ost-Sibirien, vol. 1, p. 180 (Bureja Mountains, Amur). Not Mus pumilio var. major Brants, Muizen, p. 105.—1827.

Type.—Adult male (skin and skull) No. 197,792 U. S. National Museum. Collected on the Sungaree River, 60 miles southwest of Kirin, Kirin Province, Manchuria, July 6, 1913, by Arthur de Carle Sowerby. Original No. 625.

Diagnosis.—Like Apodemus peninsulae (Thomas) but size greater, ear longer, and skull more robust; ground color of upper parts slightly darker and less yellowish than in A. peninsulae in corresponding coat.\*

Measurements.—Type and adult female (No. 197,789) from the type locality, both with teeth much worn: head and body, 115 and 110; tail, 119 and 112; hind foot, without claws, 26 and 24; ear, 16.5 and 17; condylobasal length of skull, 28.3 and 27.4; zygomatic breadth, 14.4 and 14.5; interorbital constriction, 4.7 and 4.5; breadth of braincase, 12.0 and 11.9; depth of braincase at middle, 8.5 and 8.3; nasal, 12.2 and 12.5; diastema, 9.2 and 9.0; mandible, 17.0 and 16.9; maxillary toothrow (alveoli), 4.3 and 3.7; mandibular toothrow (alveoli), 4.0 and 3.7.

Specimens examined.—Five, all from the type locality.

Remarks.—The specimens of Apodemus practor have been compared with 35 skins of A. peninsulae from Kansu, Shensi, Shansi and Korea. In this series the two largest individuals (females), both from mountains thirty miles west of Kuei-hua-cheng, northern Shansi, measure: head and body, 100 and 101; tail, 102 and 93; hind foot, 23 and 21; ear, 15.5 and 14.

<sup>\*</sup> Four of the skins are in faded winter pelage; the fifth shows the beginning of the summer molt.

In size and general appearance the Manchurian animal resembles *Apodemus nigritalus* Hollister from the Altai Mountains. It is distinguishable, however, by longer ear and by less convex dorsal profile of skull.

### Epimys norvegicus socer subsp. nov.

Type.—Adult male (skin and skull) No. 144,020, U. S. National Museum. Collected at Taocheo, Kansu, China, January 30, 1905, by W. W. Simpson. Original No. 5.

Diagnosis.—Like Manchurian specimens of Epimys norvegicus caraco (Pallas) but color paler, essentially as in the palest European specimens of E. norvegicus norvegicus, the difference between the two races about the same as that between Mus wagneri mongolicus and M. wagneri manchu.

Color.—Type: upperparts a dull buffy gray noticeably "lined" by the longer blackish hairs, the median region from crown to base of tail with a slaty tinge, the sides clearer buff (between the cream-buff and cartridge-buff of Ridgway); underparts buff like that of sides but without intermingling of dark hairs, the slaty under color appearing irregularly at surface; feet and underparts of tail light cartridge-buff, dorsal surface of tail sharply contrasted dark brown. Three immature individuals essentially like type but with slaty dorsal area broader and more diffuse.

Measurements.—Type (teeth moderately worn): head and body, 200; tail, 130; hind foot (dry), 38; hind foot without claws (dry), 36; condylobasal length of skull, 45.1; zygomatic breadth, 23.9; interorbital constriction, 6.7; breadth across postorbital angles, 11.3; least breadth across ridges at level of interparietal, 10.6; occipital breadth, 18.5; occipital depth, 11.6; nasal, 16.9; diastema, 12.5; mandible, 27.5; maxillary toothrow (alveoli), 7.7; mandibular toothrow (alveoli), 7.3.

Specimens examined.—Eight, from the following localities: Taocheo, Kansu, 4; Yu-ling-fu, Shensi, 1; twelve miles south of Yen-an-fu, Shensi, 3.

Remarks.—With the exception of one specimen, a young-adult female (teeth slightly worn) from 12 miles south of Yen-an-fu, the series is very uniform. In this individual the color is so decidedly paler that the animal appears at first glance to be a pallid example of Epimys confucianus luticolor. It is probably abnormal as the others from the same place show no peculiarities. Taking the seven normal specimens as a whole the Chinese race is readily distinguishable from Epimys norvegicus caraco, as represented by six skins from Kirin Province, Manchuria, by characters which closely parallel those distinguishing the local forms of Mus occurring in the same regions.

The exact agreement of some of the not fully adult Kirin specimens with Pallas's account convinces me that the Manchurian and East Siberian representative of *Epimys norvegicus* is the original "Mus caraco" as suggested by Thomas in 1909.\* Kashtschenko has, however, recorded his opinion to the contrary and has proposed the new subspecific name

<sup>\*</sup> Ann. and Mag. Nat. Hist, ser. 8, Vol. 4, p. 502. December, 1909.

primarius for the eastern form.\* Both caraco and socer are distinguishable from true norvegicus by less harsh fur, more hairy tail (the annulations mostly concealed, and the color of dorsal surface of tail noticeably darker than that of body), shorter hind foot, and by the smaller skull with more abruptly constricted interorbital region and more nearly parallel ridges on braincase, the least distance between these ridges at interparietals tending to be equal to or less than that between post-orbital angles, while in true norvegicus it is usually (though not invariably) greater.

<sup>\*</sup> Ann. Mus. Zool, Acad. St. Pétersbourg, Vol. 17, (1912), p. 401, 1913.